



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

GENERAL INDEX.

Agar agar in artificial cultures, 46, 102, 104.
 Alfalfa, diseases of, 81.
 Alum:
 Cost of, 26.
 For downy mildew of the grape, 25.
 Ammonia, 19.
 Cost of, 26.
 Effect on London purple and Paris green, 21.
 Ammoniacal copper carbonate, 23, 86, 90, 138.
 Chemical reaction in, 24.
 Comparative value of, 12, 89, 94, 141, 186.
 Cost of, 24, 93, 141.
 For apple scab, 19, 20, 81, 86.
 For bitter rot of the apple, 81.
 For black rot of grapes, 12, 186.
 For brown rot and downy mildew, 13.
 For cranberry scald, 18.
 For pear leaf-blight, 139, 140.
 For pear scab, 135.
 For potato blight, 191.
 For powdery mildew of the apple, 15.
 For ripe rot of grapes and apples, 172.
 For tomato rot, 83.
 Formula for, 23.
 Not to be mixed with insecticides, 20.
 Profits from use of, 94.
 With Bordeaux mixture, 12, 92, 93.
 With Paris green, 188.
 Ammonium hydrate for wheat smut, 117.
 Announcement, 45.
 Anthracnose:
 Difficulty of controlling with fungicides, 105.
 Of beans, 48.
 Of beans and melons, 105.
 Of cotton, 100, 173.
 Of currants, 42.
 Of grape, 11, 13, 85, 99, 105, 190.
 Of hollyhock, 45, 115, 135.
 Of maple, 82.
 Of oak, 82.
 Of peppers, 186.
 Apoplexie, 97.
 Apple, bitter rot of, 81, 166.
 Apple blight, 109.
 Apple powdery mildew, treatment of, 11.
 Apple rust, 85, 131.
 Apple scab, 81, 128, 132, 187, 188.
 Treatment of, 19, 81, 85, 86, 87.
 Apples ripe rot of, 164 (*see* Bitter rot).
 Apricot, shot-hole fungus, 188.
 Arsenic for wheat smut, 117, 118.
 Artificial cultures of—
 Cotton anthracnose, 102, 175, 176.
 Geranium disease, 115.
 Hollyhock anthracnose, 47.
 Olive tuberculosis, 149.
 Peach yellows, 81.
 Smut, 3, 60, 158.
 Azurin for potato blight, 78, 79.
 Bacteria:
 Cause of geranium disease, 114.
 Cause of oat disease, 73, 130.
 Cause of olive tuberculosis, 148, 150.
 Cultures of, 73.
 In carnation disease, 128.
 In corn, 185.
 In potato scab, 128.
 In raising bread, 131.
 Bacteriological work at the zoological station at Naples, 149.
 Barley, modification of Jensen method for, 132.
 Seedlings, why not infected by smut, 164.
 Smut, 69, 133, 154, 155.
 Bean:
 Anthracnose, 48.
 Rust, 189.
 Rust and other fungous diseases, 135.
 Bean's sulphur preparations, 81, 86.
 Beet:
 Leaf blight of, 190.
 Rust of, 190.
 Beetles:
 Eating smut, 133.
 Not cause of peach rosette, 146.
 Bellows for applying sulphur, 13.
 Bermuda, lily disease in, 43.
 Berry, J. O., experiments in vineyard of, 89.
 Bitter rot of:
 Apples, 81, 166.
 Grapes, 166, 171.
 Blackberry rust, 106.
 Black knot, 80.
 On plum, 134.
 Why not legislate against, 81.
 Black rot of grapes, 87, 109, 130, 185.
 Ammoniacal copper carbonate for, 12, 186.
 Bordeaux mixture for, 81, 129, 186.
 Botanical description of, 81.
 Comparative test of fungicides for, 186.
 In northern Ohio, 86.
 In western New York, 99.
 New remedies for, 25.
 On wild species, 83.
 Recent observations on, 130, 185.
 Treatment of, 11, 89.
 Black rust of cotton, 173, 174.
 Black spot of the rose, 43.
 Blight:
 Of apples, 109.
 Of grape, 95, 109.
 Of oak, 82.
 Of plum, 108.
 Of sycamore, 84.
 Blue vitriol: (*see* Copper sulphate).
 Effects on vitality of grain, 9, 10.
 For smut, 80.

Bordeaux mixture, 90.
 Chemical reaction in, 22.
 Cost of, 12, 24, 92, 138, 139, 141.
 For anthracnose, 105, 129.
 For apples, 87.
 For black knot, 188.
 For black rot of grapes, 12, 81, 129, 186.
 For leaf-blight and scab, 14, 142, 189.
 Form on plant, 24.
 Formula for, 21, 78, 79.
 For pear leaf blight, 138, 139, 141, 189.
 For pear scab, 142.
 For peach and plum rust, 81.
 For potato blight, 78, 79, 135, 191.
 For potato rot, 188.
 For strawberry leaf-blight, 186.
 For tomato rot, 83.
 For wheat smut, 117, 118.
 Profits from use of, 93.
 Relative value of, 89, 91, 141, 186.
 With ammoniacal solution, 12, 92, 93, 94.

Bread, fermentation of, 131.

Brefeld, Oscar, translation from, 1, 59, 153.

British Gastromycetes, 39.

Brown rot:
 Of the grape, 11, 12.
 Of stone fruits, 87, 110.

Calcium chloride, cost of, 26.
 For downy mildew of the grape, 25.

Calcium sulphide with insecticides, 21.

California, powdery mildew in, 13.

Canada thistle rusting out, 131.

Canker, 41.

Carbolic acid for wheat smut, 117.

Carbon bisulphide for wheat smut, 117.

Carnation disease, specific germ of, 128.

Cedar apples, 85.

Cedar gall and rust on apple leaves, 131.

Cedars, necessity of removal, 85.

Celery blight, 131.

Cereals, report on loose smuts of, 132.

Chemical reactions in fungicides, 22-24.

Cherry disease, 84.

Cherry:
 Leaf spot of, 84, 189.
 Powdery mildew of, 190.

Chinch bugs, experiments to disseminate disease among, 86.

Chloroform for wheat smut, 117, 118.

Choke cherry, removal of, 134.

Cistern water for wheat smut, 117.

Citrus plants, bacillus in gum and pus of, 150.

Clover rust, 187.

Combating the potato blight, 78.

Concord vines, rot on, 89.

Conidia of smut fungi, 4, 60.

Contributions to the mycology of western New York, 129.

Copper acetate:
 Comparative value of, 141.
 Cost of, 26, 140.
 For pear leaf-blight, 138, 140.
 Solution, formula for, 25.

Copper, amount of poisonous doses, 94.

Copperas, effects on vitality of corn, 11.

Copper carbonate (*see* ammoniacal copper carbonate):
 Cost of, 26.
 How obtained, 19.

Copper carbonate in suspension, 89, 90, 92, 94, 129, 138, 140, 141.
 Cost of, 93.
 For anthracnose of grapes, 129.
 With London purple or Paris green, 21.

Copper carbonate and ammonia, amount needed for apple scab, 20.

Copper compounds for bean rust, 189.

Copper gypsum for grape mildew, 73.

Copper mixtures for black rot of grapes, 129.

Copper on fruit, 94, 95, 188.

Copper preparations, comparative test of, 186.

Copper salts as fungicides, 21.

Copper soda solution for potato blight, 78.

Copper soda and copper gypsum for grape mildew, 73.

Copper sulphate, 73.
 Cost of, 26.
 For black rot of grapes, 12.
 For leaf-blight of pear and quince, 189.
 For leaf-blight of plum and cherry, 189.
 For potato blight, 78.
 For wheat smut, 117, 118, 132.

Corn:
 Bacterial disease of, 185.
 Effects of blue vitriol on vitality of, 9.
 Rust of, 80.

Corn smut, 80.
 Effect on plant, 160, 162.
 Germination of spores, 2, 4, 158.
 Infection by, 61, 158, 161.
 Notes on, 86.
 Places of penetration, 159.

Corrosive sublimate, 134.

Cost:
 Of fungicides, 24, 26, 92.
 Of spraying pumps, 20, 55.

Cost of treating:
 Apple powdery mildew, 15.
 Black rot of grapes, 92.
 Onion smut, 44.
 Pear scab and leaf blight, 14, 141.

Cotton:
 A new Ramularia on, 128.
 Anthracnose of, 100, 173.
 Black and red rust of, 174.
 Root-rot of, 84.
 Rust, 100.

Cranberry bogs, improving sanitary conditions of, 18.

Cranberry:
 Fungous diseases of, 43.
 Gall fungus, 19, 43.
 Scald, 18, 43, 187.

Culture methods, 2, 4, 7, 46, 60, 63, 102, 149, 155, 158, 170.

Curled leaf, 83.

Currants, anthracnose of, 42.

Cutting out for pear disease, 114.

Damping off, 41, 80, 84, 86, 87.

Diatoms, parasite of, 190.

Digging out for peach yellows, 16.

Downy mildew of grapes, 83.

- In western New York, 99.
- New fungicides for, 25.
- Treatment of, 11, 73.

Downy mildews of Kansas, 41.

Dusty smut, 61, 69, 155, 163.

Eau celeste, chemical reaction in, 22.

- Cost of, 24.
- For apple scab, 86.
- Form on plant, 24.
- Formula for, 22.
- For smut, 117.

Eau celeste modified, 86.

- Cost of, 24.
- Chemical reaction in, 23.
- Form on plant, 24.
- Formula for, 23.

Economic fungi, 43, 80.

Edible fungi, common species of, 84.

Eddy chamber nozzle, 15.

Effects of certain fungicides on the vitality of seeds, 8.

Egg-plant blight, 131.

Entomogenous fungi, 38.

Ether for wheat smut, 117.

Exotic fungi, 185.

Experiments:

- For dissemination of a chinch-bug disease, 86.
- In 1889 in fungous diseases of plants, 81, 85.
- In the treatment of plant diseases, 89, 137.
- With fungicides for plant diseases, 81.
- With fungicides for stinking smut of wheat, 117.
- With remedies for apple scab, 86.

Fairy rings, 133.

Fenestrata sporidia, observations on development of, 29.

Fermentation of bread, 131.

Field notes, 107.

Fishes, fungi affecting, 83.

Florida, a new *Ustilago* from, 116.

Flowers of sulphur:

- Cost of, 26.
- For anthracnose of grape, 14.
- For onion smut, 44.
- For powdery mildew of the grape, 13.

Follette, 97.

Forage plants, diseases of, 84.

Form genera, 180.

Fruit trees, fungous diseases of, in Iowa, 84.

Fungi:

- Affecting fishes, 83.
- Injurious to crops, 82.
- New, 31, 33, 35, 76.
- Nomenclature of, 83.
- Some tiny, 80.

Fungicides, 85, 86.

- And insecticides, 20, 188.
- Chemical reactions in, 22, 24.
- Effect on vitality of seeds, 8.
- For stinking smut of wheat, 117, 187.
- New, for downy mildew, 25.
- Notes on, 25.
- Relative value of, 141.

Fungous diseases:

- Of plants and their remedies, 43, 87.
- Of sweet potato, 186.

Fungous growths, 188.

Fungous root diseases, 188.

Fungus under bark of log, 79.

Georgia, peach rosette in, 143.

Geranium disease, 114.

Grain rust, 80.

Grain, smut of, 80, 131.

Grape:

- Black rot of, 199. (*see* Black rot.)
- Blight or rust of, 95.
- Downy mildew of, 11, 25, 83, 99.
- New fungus of, 187.
- Powdery mildew of, 13, 83, 99.
- Ripe rot of, 164.

Grape Cladosporium, 99.

Grape diseases:

- In western New York, 17.
- Treatment of, 83.

Grape Gloeosporium, 99.

Grapevine:

- Diseases in Minnesota, 83.
- Fungous diseases of, 189.

Greeley rot, 83.

Green vitriol (*see* Iron sulphate).

Griffin, Ga., plum blight in, 108.

Ground bone for lettuce, 17.

Gypsum. (*see* Copper gypsum.)

Gypsum, calcined for grape mildew, 74.

Hackberry knots, 83.

Hatch, A. L., experiments in apple scab by, 19.

Healing of wounds on trees, 41.

Hollyhock diseases, 43, 45, 185.

Hollyhock, new disease of, 45, 116, 135.

Host Index of United States Fungi, 130, 185.

Hot water for preventing smut, 27, 117, 118, 128, 133, 188.

Improved Vermorel nozzle, 91.

Index to North American Mycological Literature, 80, 128, 184.

Infection experiments:

- On olive plants, 150.
- With cotton anthracnose, 105, 177.
- With hollyhock fungus, 48.
- With oat disease, 73.
- With ripe rot, 166.
- With smut fungi, 8, 59, 61, 153, 156, 158, 162.

Insecticide and fungicide mixed, 21.

- Formula for, 188.

Iowa:

- Fungous diseases of fruit trees in, 84.
- Saprophytic fungi of eastern, 84.

Iron chloride for beet rust, 190.

Iron sulphate:

- Cost of, 26.
- For anthracnose of grapes, 13, 85.
- For washing wounds in pear trees, 114.

Ithaca, Wisconsin, experiments in apple scab at, 19.

Japanese plum disease, 80.

Jensen method of preventing smut, 27, 118, 128, 131, 132, 133, 187.

Journal of Mycology, manner of publication, 45.

Kansas, peach rosette in, 144.

Karyokinesis, in *Peronospora parasitica*, 40.

Kerosene for black knot of plum, 188.

Knapsack pump, 14, 50, 91.

- Cost of, 26, 55.
- Description of, 51.
- New, 51.

Kühn, infection experiments by, 61.

Larch disease, 41.

Late treatments for pear-leaf blight, 139.

Leaf-blight:

- Of pear, 137.
- Of quince and pear, 42.

Leaf spot of plum and cherry, 189.

Legislation against fungous diseases, 82.

Lettuce mildew, 17.

Life history, the basis of classification, 181.

Lily disease in Bermuda, 43.

Lima beans, mildew on, 44, 85.

Lime: (see Calcium.)

- Cost of, 26.
- For grape anthracnose, 14.
- For grape mildew, 74.
- For wheat smut, 117.

List:

- Of fungi on Allium, 44.
- Of Kansas species of Peronosporaceæ, 41.
- Of Staten Island fungi, 129.

Little Giant spraying machine, 90.

London purple mixed with fungicides, 21.

Loose smuts of cereals, 132.

Louisiana, new fungi from, 35.

Lye for wheat smut, 117.

Maple, anthracnose of, 82.

Maxwell, Dr. W. S., experiments in orchard of, 137.

Mercuric chloride for wheat smut, 117.

Michigan practice in preventing yellows, 15.

Mignonette disease, 187.

Mildew, 132.

- Of cherry, 190.
- Of grape. (see Downy and powdery mildew.)
- Of Kansas, 41.
- Of lettuce, 17.
- Of lima beans, 44, 85.
- Of plants under glass, treatment of, 16.
- Of roses, 16, 135.

Millet smut:

- Development in host, 157, 163.
- Germination of spores, 2, 4, 156.
- Infection experiment with, 61, 156.
- Time of penetration into host, 157.

Minnesota:

- Diseases of grapevine in, 83.
- Species of Isaria and an attendant Pachybasium, 75.

Mixture No. 5:

- Comparative value of, 141.
- For pear leaf-blight, 140.

Mold on the onion, 42.

Monograph of the British Gastromycetes, 39.

Montana, Coprinus from, 81.

Mushrooms, 130.

Mycological notes, II, 178.

Mycological observations, 84.

Name of fungus on grapes and apples, 167.

Naples, bacteriological work at, 149.

Nematodes and the oat crop, 82.

New fungi, 33, 76, 185.

New fungicides, 25.

New North American fungi, 129, 185.

New North American Hyphomycetes, 190.

New species of fungi, 31, 35.

New species of Myxomycetes, 189.

New species of Uredineæ and Ustilagineæ, 118.

New York:

- Contributions to mycology of, 129.
- Grape disease in, 95.
- Report of State botanist, 134.
- Report on fruit-growing in western, 128.

Nitrate of soda for lettuce, 17.

Nomenclature of fungi, 83.

North American:

- Fungi, 80, 84, 185.
- Pyrenomycetes, 185.
- Species of Laboulbeniaceæ, 44.
- Species of Tylostoma, 185.

Notes on certain Uredineæ and Ustilagineæ, 121.

Nozzles, 55, 91.

Vermorel, 138.

Nuclei in *Peronospora parasitica*, division of, 40.

Nutrient media, 3, 4, 46, 149, 158, 176.

Oak, anthracnose or blight of, 82.

Oat:

- Distribution of disease, 72.
- Mode of smut infection, 27.
- Nematodes in, 82.
- New and destructive disease of, 72, 130.
- Susceptibility to infection by smut, 154.

Oat smut, 26, 69, 133.

- Development of, 27.
- Experiments with infection by, 61.
- Germination of, 2, 4, 5.
- Position of spikelets attacked by, 154.
- Prevention of, 187.

Olive tuberculosis, 148.

Onion:

- Macrosporium, 44.
- Mildew, 44.
- Mold, 42.
- Smut, 44, 85.
- Vernicularia, 44.

Orchards, effect of forest management on, 131.

Paraffine imbedding for fungi, 40.

Parasitic fungi of Texas, 83.

Parasitic fungus, 185.

Parasitism, 3.

Paris green mixed with fungicides, 21.

Peach:

- Brown rot of, 110.
- Leaf curl, 107.
- Rosette, 110, 143.
- Rust, Bordeaux mixture for, 81.

Peach yellows, 81, 84, 110, 184.

What to do for, 15.

Pear:

- Entomosporium of, 189.
- New disease of, 113.
- Ripe rot attacking, 165.

Pear leaf-blight, 42, 81, 87, 109, 133, 137, 138.

- Effects of treatment, 141.
- Loss of foliage from, 84, 142.

Pear leaf-blight, treatment of, 11, 14.

Pear or fire blight, 134.

Pear scab, 135, 137.

- Potassium sulphide for, 81.
- Treatment of, 11, 14, 142.

Peppers, anthracnose of, 186.

Pine blister, 41.

Plant diseases, experiment in treatment of, 89, 137.

Plum :

- Bacillus in swellings of, 150.
- Black knot on, 134.
- Blight of, 108.
- Japanese disease, 80.
- Leaf-blight or shot-hole fungus, 133.
- Leaf spot of, 189.
- Peach rosette on, 144.
- Pockets, 108.
- Rot of, 85.
- Rust, Bordeaux mixture for, 81.
- Wart of, 188.

Poisonous action of *Clathrus columnatus*, 43.

- Of copper on grapes, 94, 188.

Potassium bichromate, for wheat smut, 117, 118.

Potassium sulphide :

- Cost of, 26.
- For apple scab, 81.
- For bitter rot of the apple, 81.
- For oat smut, 187.
- For pear scab, 81.
- For powdery mildew of grape, 13.
- For powdery mildew of roses, 135.
- For ripe rot of grapes and apples, 172.
- For strawberry leaf-blight, 85.
- For wheat smut, 117.
- Solution, formula for, 13.
- With insecticides, 21.

Potato blight, 87, 90, 134, 135.

- Experiment in preventing, 135, 191.
- Fungicides for, 78.
- Number of sprayings for, 79.

Potato disease like that of geraniums, 115.

Potato rot, 131, 132, 135, 185, 186, 187, 188.

Potato scab, 128, 190.

Poudre Coignet for potato blight, 78, 79.

Powder :

- For anthracnose of grapes, 14.
- For grape mildew, 74.

Powdery mildew :

- Of the apple, 11, 14, 87.
- Of cherry, 87, 190.
- Of grapes, 11, 13, 83, 99.
- Of the rose, 135.

Preliminary experiments with fungicides for stinking smut of wheat, 133.

Prevention of smut, 26, 83, 132.

Pumps. (see Spraying machines.)

Quince :

- Entomosporium of, 189.
- Leaf blight of, 42, 87.

Radish, dangerous enemy of, 131.

Raspberry stem-fungus, 80.

Red rot of timber, 41.

Red rust of cotton, 174.

Relationship of *Puccinia* and *Phragmidium*, 111.

Report of condition of crops in western New York, 128.

Reviews of recent literature, 38, 117.

Ripe rot of grapes and apples, 164.

Root rot :

- Of cotton, 85.
- Of salsify, 186.
- Of the vine, 43.

Rose :

- Black spot of, 43.
- Leaf-blight, 190.
- Mildew, 16, 135.
- Rust, 190.

Rosette of peach, 110, 143.

Rougeot, 97.

Rust :

- Of beans, 189.
- Of beets, 190.
- Of blackberry, 106.
- Of Canada thistle, 131.
- Of clover, 187.
- Of grain, 80.
- Of grape, 95.
- Of Indian corn, 80.
- Of rose, 190.
- Of wheat, 80.

Rusts, smuts, ergots, and rots, 82.

Saccardo's *Sylloge Fungorum*, completion of, 128.

Salicylic acid for wheat smut, 117.

Salsify, root rot of, 186.

Salt, for wheat smut, 117.

Scab :

- Of olive, 150.
- Of pear, 137.
- Of potato, 190.
- Of wheat heads, 191.

Seedlings attacked by smut, 153.

Seedlings in nursery attacked by leaf-blight, 14.

Seeds, vitality of, affected by fungicides, 8.

Shellac for coating wounds in pear trees, 114.

Shot-hole fungus, 133, 188.

Smut :

- Conditions of infection, 153, 154.
- Description of hot-water method of preventing, 28.
- Diseases, recent investigations of, 1, 59, 153.
- Its habits and remedies, 188.
- Infection by, 27, 154.
- New form of, 155.
- New white, 82.
- Of corn, 80.
- Of oats and other cereals, prevention of, 26.
- Of onions, 44, 85.
- Of sorghum, 80.
- Of corn, 86.
- Of grain, 80, 131, 132.
- Of wheat, 117, 128, 132, 133.
- Prevention of, 83.
- Stinking, 80, 133.
- Times of infection of host, 153, 164.

Smut-eating beetles, 133.

Smut fungi, 1, 59, 153.

- Penetration into the host plant, 8, 163.

Soap for wheat smut, 117.

Soda for grape mildew, 74.

Sodium bicarbonate for wheat smut, 117.

Sodium carbonate, for wheat smut, 117.

Sodium hyposulphite:
 Cost of, 26.
 For apple scab, 81.
 For strawberry leaf-blight, 85.
 For wheat smut, 117.
 With insecticides, 21.

Sodium sulphate for wheat smut, 117.

Sorghum smut, 80.

Spinach, fungous diseases of, 131.

Spraying:
 For grape mildew, 74.
 For hollyhock disease, 50.

Spraying machines:
 Cost of, 26, 55.
 Eureka, 90.
 For apple scab, 20.
 Home made, 138.
 Japy, 90.
 Knapsack, 14, 26, 50, 51, 91.
 Nixon, 91, 138.

Sprayings:
 Early, 139, 141.
 Number of, 79, 89, 90, 130, 140.
 Time of, 20, 90, 91.

Station botany, some bad, 185.

Stinking smut, 80.
 Of wheat, 117, 132, 133, 186, 187.

Stone smut in wheat, 61, 117.

Strawberry:
 Leaf-blight of, 83, 87, 134.
 Notes on culture, 85.

Strawberry pests, 186.

Sulphur:
 For lettuce mildew, 17.
 For mildew of rose, 17, 135.
 For onion smut, 44.
 For powdery mildew of the grape, 13.
 Means of applying, 13.

Sulphurous oxide for wheat smut, 117.

Sweet potato, fungous diseases of, 186.

Sweet potato rots, 82, 131, 187.

Sycamore blight, 81.

Temperature, effects on smut infection, 154.

Texas, some parasitic fungi of, 83.

Timber:
 Some of its diseases, 40.
 Red rot of, 41.

Timber—Continued.
 Wet rot of, 41.

Toadstools, 188.

Tomato diseases, treatment of, 83.

Treatment:
 Of anthracnose of the vine, 190.
 Of apple scab, 19, 87.
 Of blackberry rust, 106.
 Of black rot of grapes, 11, 12, 25, 81, 89, 129, 186.
 Of cranberry scald and gall fungus, 18.
 Of fungous diseases of plants, 85, 133.
 Of grape diseases, 83.
 Of grape mildew, 73.
 Of grape and potato diseases, 83.
 Of hollyhock disease, 50.
 Of mildews on plants under glass, 16.
 Of olive tuberculosis, 153.
 Of onion smut, 44.
 Of pear leaf-blight, 138.
 Of pear scab and leaf-blight, 14, 137.
 Of pear scab, 142.
 Of ripe rot of grapes and apples, 172.
 Of smut in wheat, 128.

Tuberculosis of olive, 148.

Uredinia parasites, 44.

Verdigris, 25.

Vermorel nozzles, 14, 15, 91, 138.

Vienna, Va., experiments at, 89.

Vine:
 Bacillus in cancer of, 150.
 Blight, 109.
 Diseases, 129.
 Dotted and speckled anthracnose of, 85.
 Mysterious disease, 189.
 New dangerous parasite of, 187.
 Root-rot of, 43.

Wet rot of timber, 41.

Wheat:
 Effects of blue vitriol on the vitality of, 10.
 Note on rust of, 80.
 Scab of heads, 191.
 Smut, 69, 117, 128, 132, 185, 186, 188.

Wheat smut, treatment for, 117, 128, 132, 187, 188.

White smut, new, 82.

Wounds, healing of, 41.

Yeast, 5, 6, 131.

Yellows, identical with rosette, 143.

Yellows of peach, 81, 84, 110, 184.

INDEX TO FUNGI.

[NOTE.—Fungi described in the text are in small capitals, synonyms in italics.]

<p><i>Acrocystis batatus</i>, 186. <i>Actinoceps Besseyi</i>, 133. <i>Thwaitesii</i>, 133. <i>Actinonema rosa</i>, 43, 86. ÆCIDIUM ALBUM, 31. <i>Barkhausiae</i>, 31. <i>biforme</i>, 122. <i>crassum</i>, 121. <i>CREPIDICOLUM</i>, 31. <i>crepidis</i>, 31. <i>EUROTIÆ</i>, 119. <i>graveolens</i>, 112. <i>heliotropi</i>, 122. <i>Magelhænicum</i>, 112. MICROPUNCTUM, 119. <i>monoicum</i>, 121. PALMERI, 122. <i>pentstemonis</i>, 122. <i>porosum</i>, 121. <i>pulcherrimum</i>, 121. <i>ranunculacearum</i>, 121. <i>ranunculi</i>, 121. <i>rhamni</i>, 121. <i>Rostruppii</i>, 31. <i>Agaricini</i>, 133. <i>Agaricus campester</i>, 84. <i>melleus</i>, 41, 43. <i>sapidus</i>, 84. <i>Aleurodiscus Oakesii</i>, 179. <i>Amanite</i>, 130. <i>Anemæ</i>, 191. <i>Anthostoma Ontariensis</i>, 129. <i>Anthostomella eructans</i>, 130. <i>ludoviciana</i>, 129. <i>Arachnion</i>, 39. <i>Armillaria</i>, 134. <i>Arthrosporium</i>, 84. <i>Ascochyta rufo-maculans</i>, 165, 167, 173. <i>Ascomyces deformans</i>, 83. <i>Ascomycetes</i>, 4, 6. <i>Aspergillus</i>, 190. <i>Asterina bignoniæ</i>, 129. <i>rubicola</i>, 129. <i>Bacillus amylovorus</i>, 109. <i>caulicolous</i>, 115. <i>olea-tuberculosis</i>, 150. <i>subtilis</i>, 131. <i>Bactridium</i>, 84. <i>Badhamia lilacina</i>, 189. <i>Basidiobolus ranarum</i>, 38. <i>Basidiomycetes</i>, 6. <i>Beggiatoa alba</i>, 84. <i>BOTRYODIPLODIA VARIANS</i>, 37. <i>Botrytis</i>, 43. <i>Bremia lactucae</i>, 186.</p>	<p><i>Bulgaria inquinans</i>, 179. <i>Bulgariæ</i>, 178. <i>Cæoma nitens</i>, 106. <i>Calonectria Dearnessii</i>, 129. <i>Calosphaeria alnicola</i>, 129. <i>microsperma</i>, 129. <i>smilacis</i>, 187. <i>Calyptospora</i>, 11. <i>Gœppertia</i>, 34. <i>Camarosporium acerinum</i>, 130. <i>subfenestratum</i>, 29, 30, 31. <i>Ceratocystis fimbriata</i>, 186. <i>Ceratostoma conicum</i>, 129. <i>juniperinum</i>, 129. <i>parasiticum</i>, 129. <i>Ceratostomella mali</i>, 129. <i>Cercospora</i>, 48, 83. <i>ALTERNANTHERÆ</i>, 36. <i>altheina</i>, 43, 45. <i>apii</i>, 131. <i>beticola</i>, 190. <i>BRUNKII</i>, 33. <i>capparidis</i>, 34. <i>CLEOMIS</i>, 34. <i>geranii</i>, 33. <i>gossypina</i>, 174. <i>helvola</i>, var. <i>medicaginis</i>, 81. <i>LYSIMACHIE</i>, 34. <i>lythri</i>, 34. <i>reseda</i>, 187. <i>roseola</i>, 190. <i>THALLE</i>, 36. <i>zebrina</i>, 36. <i>Chaetomium pusillum</i>, 129. <i>Chilonectria crinigera</i>, 129. <i>Chromosporium Isabellinum</i>, 79. <i>pactolinum</i>, 79. <i>vitellinum</i>, 79. <i>Chromostylium chrysorrheæ</i>, 38. <i>Chrysomyxa</i>, 111. <i>Ciliocarpus</i>, 39. <i>CINTRACTIA AVENÆ</i>, 77. <i>Cladosporium</i>, 99. <i>macrocarpum</i>, 131. <i>VELUTINUM</i>, 76. <i>Clathroptychiaceæ</i>, 191. <i>Clathrus columnatus</i>, 43. <i>Clavaria similis</i>, 134. <i>Claviceps</i>, 86. <i>purpurea</i>, 82, 84. <i>Clitocybe multiceps</i>, 134. <i>Cœlosphaeria corticata</i>, 129. <i>Coleosporium</i>, 111. <i>pingue</i>, 126. <i>senecionis</i>, 41.</p>
--	---

Colletotrichum, 174.
ALTHÆÆ, 46.
althææ, 135.
bromi, 83, 116.
GOSSYPII, 100.
gossypii, 177.
Lindemuthianum, 46, 48.
malvarum, 116.
nigrum, 186.
SPINACLE, 34.
spinaciaæ, 131.
Comatricha longa, 134.
subcæspitosa, 134.
CONIOSPORIUM MYCOPHILUM, 35.
polytrichi, 134.
diplodiella, 83.
Coprinarii, 84.
Coprinus *bcassicae*, 134.
sclerotigenus, 81.
Cordyceps sphingum, 75.
Coremium, 76.
Cornularia rhois, 187.
Corticium amorphum, 189.
basale, 134.
lividocæruleum, 130.
mutatum, 134.
Oakesii, 189.
subaurantiacum, 134.
Cortinarius annulatus, 134.
glutinosus, 134.
luteus, 134.
paludosus, 134.
Coryne, 180.
Ellisi, 181.
unicolor, 182.
Cryptovalsa sparsa, 129.
Cucurbitaria fraxini, 129.
Kelseyi, 129.
setosa, 129.
Curreya shepherdiae, 129.
CYLINDROSPORIUM IRIDIIS, 34.
padi, 84.
Cyphella fumosa, 185.
TELA, 179.
Cystopus amarantri, 42.
candidus, 177.
ipomœæ-panduranaæ, 186.
Dacrymyces deliquescens, 84.
destructor, 183.
syringicola, 183.
Daeromyces, 180, 181.
ENATA, 182.
SYRINGICOLA, 183.
DACRYOPSIS, 180.
ELLISINA, 181.
GYROCEPHALA, 181.
NUDA, 182.
nuda, 180.
UNICOLOR, 181.
DACTYLARIA MUCRONULATA, 35.
purpurella, 35.
Dædalea unicolor, 185.
Dematiium parasiticum, 134.
Dematophora necatrix, 43.
DENDROCHIUM SUBEFFUSUM, 33.
Dermini, 84.

Deveva infundibilis, 83.
Diaporthe Americana, 129.
Columbiensis, 129.
Comptoniæ, 129.
crinigera, 129.
leucosarca, 129.
megalospora, 129.
nivosa, 129.
Diatrype hochelagæ, 129.
Macounii, 129.
Diatrypella Demetronis, 129.
vitis, 129.
Dictyuchus, 83.
Didymella andropogonis, 129.
Canadensis, 129.
cornuta, 129.
mali, 129.
Didymium eximium, 189.
Didymosphaeria accedens, 130.
andropogonis, 129.
cupula, 32.
DENUDATA, 32.
Diorchidium, 112.
boutelouæ, 83.
DIPLODIA BAMBUSÆ, 37.
CUCURBITACEÆ, 37.
lagerstræmiae, 37.
maura, var. *Americana*, 130.
Discomycetes, 86.
Dispera, 190.
Ditiola, 180.
nuda, 182.
Dothidea bigloviae, 129.
Entomophthora, 86.
calliphoræ, 38.
forficulæ, 38.
Fresenii, 38.
megasperma, 38.
plusiæ, 38.
saccharina, 38.
Entomosporium, 189.
maculatum, 14, 42, 81, 84, 86, 109, 128, 133, 137, 188.
Entyloma crastophilum, 125.
Ellisi, 82, 131.
irregularis, 125.
linariae forma veronicae, 82.
Entylomata, 82.
Epichlœa divisa, 38.
Eutypella longirostris, 134.
Fenestella amorphia, 29, 129.
Fusarium, 180.
CELTIDIS, 76.
sclerodermatis, 134.
ustilaginis, 133.
Fusicladium dendriticum, 14, 19, 81, 86, 87, 128, 135, 188.
destruens, 134.
pirinum, 81, 128, 137, 142.
Fusisporium culmorum, 191.
Gastromycetes, 39, 84.
Glišhroderma, 39.
Gleosporium, 46, 99, 100, 173.
carpigenum, 100.
CLADOSPORIOIDES, 34.
fructigenum, 81, 164-173.

Glæosporium *læticolor*, 165, 173.
lagenarium, 134.
leptospermum, 134.
Lindemuthianum, 134.
necator, 128.
nervisequum, 82, 84.
PALUDOSUM, 32.
ribis, 42, 134.
rufo-maculans, 165, 173.
venetum, 128.
versicolor, 165, 173.
GRAPHIUM *SQUARROSUM*, 36.
Gymnosporangium, 131.
macropus, 85, 86.
Hæmatomycës *faginea*, 134.
Hæmatomyxa, 178.
Halisaria *gracilis*, 38.
HAPLOSPORELLA *TINGENS*, 37.
Haplotrichum *filmetarium*, 190.
Helotium *fumosum*, 130.
mycetophilum, 134.
HENDERSONIA *tini*, 37.
Heterodermieæ, 191.
Homostegia *Kelseyi*, 129.
HORMODENDRUM *DIVARICATUM*, 35.
Hymenochæte *rugispora*, 129.
Hymenogaster, 39.
Hymenogastreæ, 39.
Hymenomycetes, 86, 130.
Hypoereëa *melaleuca*, 129.
pallida, 129.
Hyporhordii, 84.
Hypoxylon *albocinctum*, 129.
Irpea *rimosus*, 134.
Isaria *destructor*, 76.
SPHINGUM, 75.
Ithyphallus *cucullatus*, 188.
Laboulbeniaceæ, 44.
Lactarius *mutabilis*, 134.
subinsulus, 134.
Laestadia *apocyni*, 129.
Bidwellii, 11, 81, 83, 86, 109, 130, 185.
orientalis, 129.
Lepiota *farinosa*, 134.
Leptosphaeria *brunellæ*, 129.
folliculata, 129.
macluræ, 129.
steironematis, 129.
tini, 37.
Leptothyrium *perichymeni*, 116.
var. Americana, 116.
Lizonia *sphagni*, 185.
Lophiostoma *rhopaloïdes*, var. *plurisepta*, 130.
Lycogalopsis, 39.
Lycoperdeæ, 39.
Lycoperdon *cyathiforme*, 84.
Macrosporium, 75, 83.
CAROTÆ, 36.
polytrichi, 134.
porri, 44.
sarcinula, var. *parasiticum*, 44.
utile, 133.
Marasmius *albiceps*, 134.
Melampsora, 111.
Melanconis *salicina*, 129.
Melanconium *fuliginea*, 171.
Melanomma *Commonsii*, 129.
parasiticum, 129.
totonensis, 129.
Menispora, 84.
Merulius *lacrymans*, 41.
Metasphaeria *rubida*, 129.
Michenera *artoreas*, 189.
Monilia *fructigena*, 85, 87, 110, 134.
Monilochæte *infuscans*, 186.
Morchella *esculenta*, 84.
Morthiera *mespili*, 87.
Thuemennii, var. *sphaerocysta*, 130.
Mucor, 82.
tænici, 130.
MUCRONOPORUS *ANDERSONI*, 79.
Myriococcum *consimile*, 129.
Myxomycetes, 189, 191.
Nectria *athroa*, 129.
cinnabarina, 180.
diplocarpa, 129.
mammoidea, 129.
pithoides, 129.
sambuci, 129.
sulphurata, 129.
Neovossia, 6.
Neozygites *aphidis*, 38.
Nidulariæ, 39.
Nematelia *nucleata*, 84.
Endocephalum, 190.
echinulatum, 190.
elegans, 190.
glomerulosum, 190.
pallidum, 190.
roseum, 190.
verticillatum, 190.
OIDIUM *OBDUCTUM*, 35.
Ophicbolus *medusæ*, 129.
trichisporus, 129.
OPHIONECTRIA *EVERHARTII*, 32.
Orcadellaceæ, 191.
Orcadella *operculata*, 191.
OVULARIA *MACLURÆ*, 35.
Ozonium *auricomum*, 84.
Pachybasium, 76.
HAMATUM, 75.
Patellaria *fenestrata*, 29, 30.
Paurocotylis, 30.
Penicillium, 134, 186, 187.
Peniophora *unicolor*, 134.
Peridermium *pini*, 41.
Peronosporaceæ, 41.
Peronospora *alta*, 186.
arenarie, var. *macrospora*, 42.
Arthuri, 42.
candida, 42.
corydalidis, 42.
Cubensis, 83, 186.
cynoglossi, var. *echinospermi*, 42.
effusa, 131, 186.
ficarie, 186.
gangliformis, 17, 132.
graminicola, 132.
hedeomæ, 42.
obovata, 186.
parasitica, 40, 42, 186.
rubi, 82, 131.

Peronospora Schleideniana, 42, 44, 132.
 violæ, 186.
 viticola, 12, 83, 86, 109, 132, 134, 168.

Peziza ciborioides, 3.
 concrescens, 182.
 PROTRUSA, 179.
 pusio, 179.
 sclerotiorum, 3.
 tela, 180.
 Willkomii, 41.

Phacidium medicaginias, 81.

Phalloidæ, 39.

Phallus, 86.

Phellorina Californica, 134.

Pholiota æruginosa, 134.

Phoma albovestita, 130.
 allantella, 134.
 batatae, 186.
 Lyndonvillensis, 130.
 picea, var. chenopodii, 187.
 rudbeckia, 130.
 weldiana, 130.

Phragmidium albidum, 111.
 Barnardii, 111.
 carbonarium, 111.
 mucronatum, 86, 190.
 mucronatum, var. *Americanum*, 190.
 obtusum, 111.
 roseæ-alpinæ, 190.
 subcorticum, 126.

Phyllachora graminis, 76.
 STENOSTOMA, 76.

Phyllosticta ampelopsis, 130, 185.
 bataticola, 186.
 bicolor, 134.
 chenopodii, 131.
 cirsii, 130.
 Halstedii, 82.
 hortorum, 131.
 labruscaæ, 130, 185.
 MOLLUGINIS, 33.
 prini, 134.
 silenes, 134.
 VIRENS, 36.

Physalospora conica, 129.
 pandani, 129.
 pseudo-pustula, 185.
 zeicola, 129.

Physarum tenerum, 189.

Phytophthora infestans, 82, 87, 131, 132, 134, 135, 186, 188.
 omnivora, 41, 86.
 phaseoli, 44, 85, 186.

Pilobolus, 86.

Piptocephalis, 75.

Plasmodiophora, 131.

Plasmopara entospora, 186.
 geranii, 186.
 viburni, 134.
 viticola, 186.

Pleospora, 134.
 diaportheoides, 129.
 hyaleospora, 129.

Plowrightia morbosa, 80, 81, 132, 188.
 staphylina, 129.
 symphoricarpi, 129.

Podaxineæ, 39.

Podosphæra oxyacanthæ, 14, 86, 190.

Polygaster, 39.

Polyporus lacteus, 84.
 sulphureus, 41.

Polyrhizium leptophyei, 38.

Polysaccum, 39.

Pompholyx sapidum, 39.

Poria aurea, 134.

Poronia leporina, 129.

Pratelli, 84.

PROSTHEMIELLA HYSTEROIDES, 37.

Pseudopeziza protrusa, 179.

Pseudovalsa Fairmani, 130.

stylospora, 129.

Psilopezia mirabilis, 179.

Puccinia, 82, 86, 111, 112.
 aberrans, 120.
 andropogonis, 123.
 antarctica, 112.
 APOCRYPTA, 76.
 ARABICOLA, 119.
 ARALIÆ, 120.
 berberis, 112.
 bigeloviae, 120, 122.
 cladophila, 122.
 compositarum, 120.
 CONSIMILIS, 120.
 coronata, 77, 86, 121.
 dochmia, 123.
 Ellisiana, 123.
 graminis, 80, 84, 86, 112.
 Harknessii, 122.
 hieracii, 122.
 intermixta, 120.
 KAMTSCHATKÆ, 125.
 malvacearum, 43, 45, 185.
 medusaæ, 132.
 minussensis, 122.
 MIRABILISSIMA, 112, 113.
 ornata, 132.
 Palmeri, 123.
 poculiformis, 112.
 pruni, 81, 86, 125.
 rubigo-vera, 80, 84, 86.
 SEPULTA, 127.
 sorghi, 80.
 spergulæ, 186.
 suaveolens, 131.
 tanaceti, 123.
 tanaceti, var. actinellæ, 123.
 thlaspeos, 120.
 TRIARTICULATA, 126.
 variolans, 122.
 variolans, var. caulincola, 122.
 WINDSORIÆ, var. AUSTRALIS, 123.
 XANTHIFOLIA, 120.

Pyrenomycetes, 185.

Pyrenopeziza protrusa, 179.

Pyrenophora Zabriskieana, 129.

Pythium DeBaryanum, 86.
 omnivora, 87.

Ramularia areola, 128.
 Tulasnei, 80, 186.

Ravenelia Texanus, 83.

Rhabdospora sabalensis, 185.

Rhizopus nigricans, 132, 186, 187.
Rhopalomyces, 190.
candidus, 190.
cucurbitarum, 134, 190.
elegans, 190.
pallidus, 190.
strangulatus, 190.
Rosellinia albolanata, 129.
glandiformis, 129.
Kellermanii, 129.
Langloisii, 129.
parasitica, 129.
Roestelia, 86, 131.
pirata, 85.
Rostrupia, 111, 112.
Russula, 84.
brevipes, 134.
Saccharomyces cerevisiae, 131.
Saprolegnia, 86.
ferax, 83.
SARCOMYCES VINOSA, 178.
Sarcoscypha pusio, 179.
Schizonilla, 6.
SUBTRIFIDA, 119.
Schizophyllum, 84.
SCHROETERIA ANNULATA, 118.
Sclerodermæ, 39.
Sclerotinia sclerotiorum, 188.
Scoleciocarpus, 39.
SCORIOMYCES ANDERSONI, 33.
Cragini, 33.
Septocarpus, 190.
Septoria cerasina, 84, 133, 188, 189.
helianthi, 34.
pruni, 84.
RUDBECKIÆ, 33.
rufo-maculans, 164, 167, 173.
stellariae, 129.
Sigmoideomyces, 190.
dispiroides, 190.
Siphoptichium Casparyi, 189.
SOROSPORIUM, 31.
ELLISII var. *PROVINCIALIS*, 31.
Ellisi, 32.
EVERHARTII, 32.
GRANULOSUM, 77.
Sphaelacia segetum, 3.
Sphaeloma ampelinum, 13.
Sphaerella Andersoni, 129.
angelice, 129.
ciliata, 129.
conigena, 129.
fragariae, 85, 86, 87, 128, 134.
macluræ, 129.
polifolia, 129.
Sphaeria pustula, 185.
SPHÉRIDIUM LACTEUM, 36.
Sphaeropsis lappæ, 130.
Sphaerotheca pannosa, 16.
phytoptophila, 83.
pustula, 185.
Sphauchromyces, 39.
Spongospora solani, 128.
Sporodesmium toruloides, 130.
Sporotrichum cinereum, 134.
STAMNARIA PUSIO, 179.
Stachybotrys elongata, 134.
Steirochæte graminicola, 116.
malvarum, 116.
Stemonitis Bauerlinii, var. *fenestrata*, 134.
Stereum albobadium, 84.
afrotrubrum, 129.
hirsutum, 183.
Stilbum (Ciliopodium) auriflum, 185.
Synchytrium vaccini, 19, 43, 82.
Tapesia rosæ, 130.
tela, 180.
Taphrina deformans, 107, 128.
pruni, 80, 108, 132.
Teichospora Helenæ, 129.
Kansensis, 129.
mammoides, 129.
megastega, 129.
mycogena, 129.
papillosa, 129.
umbonata, 129.
Thelephora pedicellata, 113.
perdix, 114.
Thyridaria fraxini, 129.
Thyronectria chrysogramma, 129.
Tilletia, 6, 61, 63, 82, 117.
caries, 4, 188.
fetens, 80, 188.
rugispora, 83.
striiformis, 84.
tritici, 188.
Tolyposporium, 6.
junci, 158.
Trametes radiciperda, 41.
Tremella, 180.
albida, 182.
DEPENDENS, 183.
enata, 182.
gigantea, 182.
gyrocephala, 181.
MYRICÆ, 182, 183.
RUFO-LUTEA, 183, 184.
vesicaria, 182.
vinosa, 179.
Trichia erecta, 189.
subfuscata, 189.
Tricholoma grave, 134.
TRIPHAGMIUM clavellosum, 119, 123, 124.
THWAITESII, 123, 124.
Tripleosporium, 38.
Tuberularia, 180.
acinorum, 167.
carpogena, 134.
cinnabarina, 182.
vulgaris, 180.
Tubulina cylindrica, 189.
cylindrica, var. *acuta*, 130.
stipitata, 189.
Tulastomei, 39.
Tylostoma, 185.
Typhula subfasciculata, 129.
Uncinula ampelopsisidis, 13.
spiralis, 185.
Underwoodia, 134.
columnaris, 134.
Uredineæ, 44, 118.
Uredo, 86.

<p>Uredo <i>æcidiiiformis</i>, 112. <i>amsoniae</i>, 185. <i>antarctica</i>, 112. BAUHINIA, 127. NYSSEA, 77. PERIDERMIOSPORA, 77. <i>Vialæ</i>, 187. <i>vitis</i>, 187. Urocystis, 6. <i>cepulae</i>, 44. <i>occulta</i>, 62. Uromyces, 111, 112. <i>amygdali</i>, 125. <i>hyalinus</i>, 125. <i>phaseoli</i>, 189. <i>sanguineus</i>, 112. SCABER, 119. <i>sophoræ</i>, 125. <i>trifolii</i>, 125, 132, 187. Ustilagineæ, 1, 59, 118. Ustilago, 82, 86. <i>apiculata</i>, 83. <i>avenæ</i>, 133. <i>avenæ</i>, var. <i>levis</i>, 133. <i>bromivora</i>, 6, 61, 62, 158. BRUNKII, 31. BUCHLOËS, 77. <i>carbo</i>, 4, 6, 61, 62, 63, 69, 132, 158, 188. <i>caricis</i>, 6. Crameri, 6, 61. <i>eruenda</i>, 4, 6, 62, 63, 68, 156, 158. <i>cylindrica</i>, 77. <i>destruens</i>, 61, 158. <i>diplospora</i>, 119. </p>	<p>Ustilago <i>echinata</i>, 6. <i>grandis</i>, 6. HILARIA, 77. <i>hordei</i>, 6, 133, 155. <i>hypodytes</i>, 6. <i>intermedia</i>, 125. <i>longissima</i>, 6. <i>maydis</i>, 4, 6, 61, 63, 80, 84, 158. MONTANIENSIS, 119. NEALII, 116. <i>nuda</i>, 133. OXALIDIS, 77. <i>scabiosæ</i>, 125. <i>segetum</i>, 80, 132. <i>sorghi</i>, 80. <i>subinclusa</i>, 6. <i>succise</i>, 125. <i>tritici</i>, 133, 188. <i>Tulasnei</i>, 61. <i>Vaillantii</i>, 6. Valsa <i>canodisca</i>, 129. <i>clavulata</i>, 185. <i>floriformis</i>, 129. <i>glandulosa</i>, 129. Valsaria <i>salicina</i>, 129. Venturia <i>parasitica</i>, 129. <i>sabalicola</i>, 129. Vermicularia <i>circinans</i>, 44, 177. DISCOIDEA, 37. <i>solanoica</i>, 130. Verticillium, 84. Volutella, 180. Winteria <i>tuberculifera</i>, 129. ZYGODESMUS PYROLÆ, 34. </p>
--	--

INDEX TO HOSTS.

<i>Abies excelsa</i> , 150.	<i>Castilleja</i> , 119.
<i>pectinata</i> , 150.	
<i>Acer</i> , 130.	<i>Cedar</i> , 85, 86, 131.
<i>rubrum</i> , 82.	<i>Cedrus libani</i> , 150.
<i>Actinella acaulis</i> , 123.	<i>Celery</i> , 82, 131.
<i>Æsculus Californica</i> , 83.	<i>Celtis occidentalis</i> , 76.
<i>Agrostis</i> , 125.	<i>Cereals</i> , 132.
<i>Ailanthus</i> , 185.	<i>Chenopodium</i> , 187.
<i>Alfalfa</i> , 81.	<i>Cherry</i> , 82, 84, 189, 190.
<i>Allium</i> , 44.	<i>Chinch bug</i> , 86.
<i>Almond</i> , 125.	<i>Cirsium ochrocentrum</i> , 119.
<i>Alternanthera achyrantha</i> , 36.	<i>Cleome pungens</i> , 34.
<i>Ampelopsis</i> , 130, 185.	<i>Clover</i> , 187.
<i>quinquefolia</i> , 186.	<i>Cnicus arvensis</i> , 130.
<i>tricuspidata</i> , 186.	<i>Corn</i> , 61, 80, 86, 158, 185.
<i>Amsonia</i> , 185.	<i>Cornus</i> , 130.
<i>Amygdaleæ</i> , 123, 125.	<i>Cotoneaster</i> , 84.
<i>Andropogon annulatus</i> , 118.	<i>Cotton</i> , 85, 100, 128, 177, 190.
<i>argenteus</i> , 31.	<i>Cranberry</i> , 18, 43, 82, 187.
<i>muricatus</i> , 37.	<i>Crataegus</i> , 130.
<i>provincialis</i> , 31.	<i>Crepis acuminata</i> , 31.
<i>saccharoides</i> , 83.	<i>Cruciferae</i> , 177.
<i>Virginicus</i> , 32	<i>Cucumber</i> , 82.
<i>Apple</i> , 14, 19, 81, 82, 85, 87, 109, 128, 131, 132, 150, 165, 167, 171, 186, 188.	<i>Currant</i> , 42, 82, 86.
<i>Apple trees</i> , 84.	<i>Cydonia</i> , 84.
<i>Apricot</i> , 125, 150.	<i>Dædalia unicolor</i> , 185.
<i>Arabis</i> , 119.	<i>Daucus carota</i> , 36.
<i>Aralia nudicaulis</i> , 123, 124.	<i>Desmanthus</i> , 83.
<i>Asprella Hystrix</i> , 76.	<i>Diatoms</i> , 190.
<i>Avena elatior</i> , 77.	<i>Diatrype stigma</i> , 32.
<i>sativa</i> , 134.	<i>Diptera</i> , 38.
<i>Azalea</i> , 19.	<i>Earth</i> , 188.
<i>Bambusa</i> , 37.	<i>Egg plant</i> , 82, 131, 186.
<i>Barberry</i> , 112.	<i>Elymus arenarius</i> , 6.
<i>Barley</i> , 62, 69, 133, 154, 155.	<i>mollis</i> , 126.
<i>Basswood</i> log, 181.	<i>Erigeron Canadense</i> , 186.
<i>Bauhinia</i> , 127.	<i>Euonymus atropurpureus</i> , 130.
<i>Bean</i> , 44, 48, 82, 85, 135, 189.	<i>Eurotia lanata</i> , 119.
<i>Beet</i> , 82, 190.	<i>Ficus</i> , 127.
<i>Begonia</i> , 83.	<i>Fir stumps</i> , 182.
<i>Berberis glauca</i> , 112.	<i>Fish</i> , 83, 84.
<i>repens</i> , 112.	<i>Forage plants</i> , 84.
<i>Bigelovia</i> , 122.	<i>Forest trees</i> , 84.
<i>Blackberry</i> , 82, 106.	<i>Forficula auricularia</i> , 38.
<i>Bouteloua racemosa</i> , 83.	<i>Geranium</i> , 33, 114.
<i>Bread</i> , 131.	<i>Carolinianum</i> , 186.
<i>Bromus secalinus</i> , 6, 61, 62, 116.	<i>Ginseng</i> , 120.
<i>unioloides</i> , 83.	<i>Gladiolus</i> , 185.
<i>Buchloë dactyloides</i> , 77.	<i>Gooseberry</i> , 82, 85.
<i>Cabbage</i> , 82, 186.	<i>Grain</i> , 131.
<i>Capsicum annuum</i> , 186.	<i>Grape</i> , 11, 12, 13, 81, 82, 83, 85, 87, 89, 99, 109, 129, 150, 164, 166, 168, 189.
<i>Cardamine hirsuta</i> , 186.	<i>Grass</i> , 119.
<i>laciniata</i> , 186.	<i>Ground</i> , 179.
<i>Carnation</i> , 82, 128.	<i>Gutierrezia Euthamiae</i> , 120, 122.
<i>Carrot</i> , 82.	<i>Gyrus Americana</i> , 130.
<i>Carya</i> , 35.	<i>Hackberry</i> , 83.
<i>Cassia</i> , 83.	<i>Hedera</i> , 123, 124.
	<i>Vahlii</i> , 123.

Helianthus annuus, 188.
 Herbaceous stems, 36.
Hesperis matronalis, 186.
Heteropogon melanocarpa, 116.
Hilaria Jamesii, 77.
 Hollyhock, 43, 45, 105, 115, 135, 185.
Hordeum, 6, 155.
 Huckleberry, 19.
 Hungarian grass, 132.
Hypericum mutilum, 34.
Ilex verticillata, 134.
Iris versicolor, 34.
Iva xanthiifolia, 120.
Knautia arvensis, 125.
Lactuca Canadensis, 186.
 pulchella, 122.
Lagerstroemia, 37.
Lambkill, 19.
Lappa major, 130.
Larch, 41.
 Leaf, 185.
 Leather leaf, 19.
 Lemon, 150.
Lentinus ursinus, 35.
Leonurus cardiaca, 130.
 Lettuce, 17, 82.
 Lichen, 33.
Lilium Harrisii, 43.
Liriodendron, 183.
 Log, 190.
Lonicera, 116.
Lygodesmia, 122.
Lysimachia stricta, 34.
Maclura aurantiaca, 35.
Magnolia glauca, 179.
 Maize, 159, 161.
Malva, 116.
 rotundifolia, 130.
Medicago sativa, 81.
 Melon, 85.
Mespilus, 84.
Mignonette, 82, 86, 187.
 Millet, 132, 156, 157.
Mollugo verticillata, 33.
Muhlenbergia, 123.
 glomerata, 119.
Mulgedium pulchellum, 122.
 Siberica, 122.
Myrica, 183.
 Nectarines, 165.
Nyssa capitata, 77.
 Oak, 79, 82, 114.
 Oats, 4, 26, 62, 69, 72, 82, 85, 130, 133, 134, 154, 155, 156, 157, 187.
 Olive, 148, 149, 150.
 Onion, 42, 44, 82, 85, 186.
 Orange, 150.
 Orange skin, 133.
Orgyia leucostigma, 75.
Oxalis stricta, 77.
 Palmetto, 114.
Panax trifolium, 120.
Panicum brizanthemum, 76.
 proliferum, 37.
 sanguinale, 119.
Paratropa terebinthinacea, 123.
 Parsnip, 82.
Paspalum plicatulum, 83.
 Pea, 82.
 Peach, 15, 81, 82, 84, 107, 110, 125, 143, 150, 165, 188.
 Pear, 14, 42, 81, 82, 85, 86, 109, 113, 128, 133, 134, 135, 137, 150, 183, 188, 189.
 Pear trees, 84.
Pelargonium, 33, 115.
Peltandra Virginica, 32.
Pentstemon virgatus, 122.
Persea, 183.
Phalaris Canariensis, 76.
Phragmites communis, 6.
 Pine, 41.
Pinnularia, 190.
Pinus ponderosa, 33.
 Pirus, 84.
Plantago lanceolata, 186.
 major, 186.
 Virginica, 186.
Plum, 80, 82, 85, 86, 108, 125, 131, 133, 134, 144, 150, 188, 189.
Plusia gamma, 38.
Poa annua, 125.
 aquatica, 5.
Polyporus pergamenus, 35.
Potato, 82, 85, 87, 128, 131, 132, 135, 149, 185, 186, 188, 190, 191.
Prune, 188.
Prunus Americana, 108.
 Chicasa, 108, 144.
 domestica, 144.
 Pumpkin vines, 37.
Pyrola rotundifolia, 34.
Quercus coccinea, 114.
 falcata (?), 35.
 rubra, 134, 191.
 virens, 36.
Quince, 42, 82, 85, 87, 128, 189.
Radish, 131.
Ranunculus abortivus, 186.
 Cymbalaria, 121.
Raspberry, 80, 82, 131.
Rhois, 187.
Rosa, 125.
Rose, 16, 43, 82, 85, 135, 150, 190.
Rubus odoratus, 134.
 villosus, 106.
Rudbeckia hirta, 33.
 laciniata, 33, 130.
Rye, 62.
Sabal, 185.
 palmetto, 114.
Salix nigra, 37.
Salsify, 82, 186.
Sambucus, 36.
Scabiosa arvensis, 125.
 columbariae, 125.
Setaria, 6.
 Sheep laurel, 19.
Sida spinosa, 116.
Silene antirrhina, 134.
Sisymbrium linifolium, 120.
Smilax, 187.
Smut, 133.
Solanum dulcamara, 130.

Sorghum, 80.	Thistle, 131.
<i>saccharatum</i> , 62.	Timber, 41.
Spartina <i>glabra</i> , 77.	Tomato, 82, 83, 85.
Spergula <i>arvensis</i> , 186.	Troximon <i>glaucum</i> , 122.
Sphagnum, 185.	Tussock moth, 75.
Spinacea, 186.	Ustilago, 133.
<i>oleracea</i> , 82.	Veronica <i>peregrina</i> , 82.
Spinach, 34, 82, 131.	Viburnum <i>dentatum</i> , 134.
Squash, 82.	<i>tinus</i> , 37.
Stellaria <i>media</i> , 130.	Vine, 43, 150, 189, 190.
Stephanomeria <i>minor</i> , 122.	Viola, 186.
Stipa <i>viridula</i> , 77.	Violet, 82.
Stone fruits, 87.	Vitis, 130, 185, 186, 187.
Strawberry, 80, 82, 85, 87, 134, 186.	Watermelon, 82.
Sugar millet, 157.	Weeds, 85.
Sweet potato, 82, 85, 131, 132, 186, 187.	Wheat, 61, 69, 80, 85, 86, 117, 128, 132, 133, 155, 187, 188, 191.
Sycamore, 84.	White alder, 19.
Syringa, 183.	Wintergreen, 19.
Tacoma <i>stans</i> , 132.	Wood, 35, 180, 181, 182.
Tænia <i>solium</i> , 130.	Zea Mays, 63.
Tea berry, 19.	
Thalia <i>dealbata</i> , 36.	

NAMES AND ADDRESSES OF CONTRIBUTORS.

Anderson, F. W., American Agriculturist, New York, N. Y.	Lagerheim, G., University of Quito, Quito, Ecuador.
Atkinson, Geo. F., Auburn, Alabama.	Langlois, A. B., Pointe a la Hache, Louisiana.
Chester, F. D., Newark, Delaware.	MacMillan, Conway, St. Anthony Park, Minnesota.
Crozier, A. A., Ann Arbor, Michigan.	Maynard, S. T., Amherst, Massachusetts.
Ellis, J. B., Newfield, New Jersey.	Newcombe, F. C., Ann Arbor, Michigan.
Everhart, B. F., West Chester, Pennsylvania.	Pierce, Newton B., Agricultural Department, Washington, District of Columbia.
Fairchild, D. G., Agricultural Department, Washington, District of Columbia.	Smith, Erwin F., Agricultural Department, Washington, District of Columbia.
Fairman, Chas. E., Lyndonville, New York.	Southworth, Effie A., Agricultural Department, Washington, District of Columbia.
Goff, E. S., Madison, Wisconsin.	Swingle, W. T., Manhattan, Kansas.
Galloway, B. T., Agricultural Department, Washington, District of Columbia.	Tracy, S. M., Agricultural College, Mississippi.
Halsted, B. D., New Brunswick, New Jersey.	
Kellerman, W. A., Manhattan, Kansas.	